

AMENDMENT UNDER 37 C.F.R. § 1.111
Application No.: 09/635,141
Atty Docket No.: Q60353

REMARKS

The Office Action of April 3, 2003 has been received and its contents carefully considered.

Claims 3, 6 to 20, 28 to 31 and 48 are all the claims pending in the application, prior to the present Amendment.

The "Office Action Summary" states that claims 6 to 20 are pending, but this is wrong. Claims 4, 5 were previously cancelled, and claims 28 to 31 and 48 remain in the application. Applicants request the Examiner to provide a correct indication of the claims, after taking into consideration the present Amendment to the claims.

Claims 6-20 have been rejected under the second paragraph of 35 U.S.C. § 112 as indefinite, for the same reasons set forth in Paragraph 2 of the previous Office Action.

(a) With respect to claim 6, the Examiner continues to state that the laminating step is not clear because the step does not recite what is being laminated.

The Examiner states that it is not clear whether the material is being laminated to itself or to another element which is not recited.

In response, applicants have amended claim 6 to state that the laminating can be either a laminating of the multilayer foamed sheet that is produced to itself, or a laminating of produced multilayer foamed sheets to themselves.

(b) With respect to claim 7, the Examiner states that it is not clear how the folds are formed, that is, where the fold is located, which side is folded towards itself, how many folds are formed, and the like.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 09/635,141

Atty Docket No.: Q60353

In response, applicants point out that although the Examiner points out details that are not in the claim, the Examiner does not provide any reason why the absence of these details renders the claim indefinite. Thus, for example, the Examiner does not explain why it is necessary for the claim to state how the folds are formed.

Applicants submit that as far as the claim 7 is concerned, it does not matter how the fold is formed. The claim covers any method of forming a fold.

Similarly, the claim covers any fold, regardless of where the fold is located. Further, the claim covers whichever side is folded toward itself, and covers one or more folds.

(c) With respect to claim 8, and the Examiner's position that it is not clear whether a hollow cylinder or a solid cylinder is formed, the Examiner states that applicants have argued that a hollow cylinder would be formed so that it could be laminated. The Examiner, however, now states that it is not clear why a solid cylinder could not be split and laminated.

In response, applicants have amended claim 8 to state that the multilayer polyolefin foamed sheet is co-extruded into a tubular cylindrical form as disclosed, for example, at page 54, fourth line from the bottom.

In view of the above, applicants submit that the claims comply with the requirements of the second paragraph of 35 U.S.C. § 112 and, accordingly, request withdrawal of this rejection.

Claims 3, 6, 8, 12, 23-31 and 48 have been rejected under 35 U.S.C. § 103 (a) as obvious over Park et al for the reasons stated in Paragraph 6 of the previous Office Action.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 09/635,141

Atty Docket No.: Q60353

Applicants first note that it appears that claims 23 to 27 have been included in this rejection by mistake, since they have previously been withdrawn as being directed to a non-elected invention and were cancelled in the Amendment Under 37 C.F.R. § 1.111 filed on January 23, 2003.

Thus, applicants consider the rejection as being a rejection of claims 3, 6, 8, 12, 28 to 31 and 48.

Applicants have cancelled claim 3 leaving claims 6, 8, 12, 28 to 31 and 48 as being subject to this rejection. Claims 8, 28 to 31 and 48 as amended above each depend, directly or indirectly, from claim 6.

The Examiner states with respect to claim 6, that applicants have argued that Park et al do not disclose or suggest the lamination of a multilayer foamed sheet itself or lamination of two or more multilayer foamed sheets. The Examiner now argues that laminating is defined as making by bonding several layers, and therefore Park et al teach laminating.

It is not clear to applicants what portion of Park et al the Examiner is relying on for his conclusion that Park et al teach laminating.

In any event, as discussed above, applicants have amended claim 6 to state that the laminating is a laminating of a multilayer foamed sheet that is produced to itself, or a laminating of produced multilayer foamed sheets to themselves.

Park et al do not disclose or suggest such a laminating step.

In view of the above, applicants submit that Park et al do not disclose or suggest the recitations of claims 3, 6, 8, 28 to 31 and 48.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 09/635,141

Atty Docket No.: Q60353

With respect to claim 12, this claim is directed to a process of laminating two multilayer polyolefin foamed sheets with a gas barrier resin sheet. Such a process is not disclosed or suggested by Park et al.

In view of the above, applicants submit that Park et al do not defeat the patentability of claims 6, 8, 12, 28 to 31 and 48 and, accordingly, request withdrawal of this rejection.

Claim 7 has been rejected under 35 U.S.C. § 103 (a) as obvious over Park et al in view of the newly cited patent DE 2,532,406.

The Examiner did not provide a copy of DE 2,532,406, but only provided an English-language abstract. The abstract indicates that GB 1,514,369 is from the same patent family. Applicants have obtained a copy of GB 1,514,369, and enclose it for the Examiner's use. Applicants are listing GB '369 in a concurrently filed Information Disclosure Statement.

The Examiner states that Park et al do not teach that the folded material may be cut, folded and bonded to each other. The Examiner relies on DE 2,532,406 to supply the deficiency. The Examiner asserts that DE '406 teaches that sheets of foam may be folded and bonded to each other in order to form laminated foams.

The Examiner argues that, therefore, it would have been obvious to have folded the foams of Park et al, rather than cutting the layers and then bonding them in order to avoid the step of cutting and thereby reduce costs.

In response, applicants first note that claim 7 depends from claim 6. Accordingly, applicants submit that claim 7 is patentable over Park et al for the same reasons as discussed above in connection with the rejection of claim 6.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 09/635,141

Atty Docket No.: Q60353

DE '406 discloses, with reference to GB 1514369, a process for forming a tube from a strip of heat softenable deformable foam. The method comprises heat softening a first surface of the foam strip, shaping the strip into a tube having an unsealed butt joint, and then sealing the butt joint.

Applicants assume that the Examiner is interpreting the shaping in GB '369 to be a folding step. Further, in order to arrive at the recitations of claim 7, it appears that the Examiner would have to interpret the forming and sealing of the butt joint to be the same as the superimposing and laminating steps of claim 7.

GB '369 also discloses, at page 1, lines 14 to 47, a prior art method for forming a tube that includes bending the strips of foam down and folding them flat together, and welding or bonding the butt joint to form a tube having an oval cross sections.

The present invention was not intended to cover the forming of a butt joint in a tube as a laminating step. GB '369 and the abstract do not employ the word "laminating". Applicants submit that the forming of a butt joint would not be interpreted by one of ordinary skill as the forming of a laminate.

In addition, applicants submit that one of ordinary skill in the art would not be led to combining the teachings of Park et al, which relate to forming a foamed sheet, with those of DE '406 which relate to forming a tube from an already existing foam sheet and forming a butt joint. Further, the foamed sheet in DE '406 is a single layer sheet, whereas the sheet in Park et al is a multilayer sheet.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 09/635,141

Atty Docket No.: Q60353

Applicants submit that there is no relation between the butt joint of DE '406 and the foam sheet of Park et al, and therefore, one of ordinary skill in the art would not be led to combining the teachings of these two references.

In view of the above, applicants submit that claim 7 is patentable over Park et al and DE '406 and, accordingly, request withdrawal of this rejection.

Claims 9 to 11 and 13 to 18 have been rejected under 35 U.S.C. § 103 (a) as obvious over Park et al in view of Kelch.

The Examiner states that Park et al do not teach laminating a foam laminate to additional preformed layers. The Examiner relies on the teachings of Kelch at column 4, lines 44 to 61, to show that multi-layered foam materials can be laminated to additional materials, including foils, films, and combinations thereof. The Examiner states that these additional materials would inherently act as a gas barrier layer. The Examiner argues that it would have been obvious to bond the Park et al structure to additional layers as taught by Kelch in order to further enhance the properties of the multi-layered material.

In response, applicants have cancelled claim 9, and have amended claims 10, 11 and 13 to 18 to place them in independent form.

Claims 10, 11 and 13 to 18 are directed to a method comprising a step of laminating two co-extruded foamed resin sheets and a gas barrier sheet. Neither Park et al nor Kelch disclose or suggest such a feature.

With respect to claim 10, neither Park et al nor Kelch suggest an incising step at two points to form multi-layer polyolefin foamed sheets which are then laminated together with a gas

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 09/635,141

Atty Docket No.: Q60353

barrier resin sheet as an intermediate layer. Similarly, claim 11 requires the laminating of two multilayer polyolefin sheets and a gas barrier resin sheet and is not suggested or disclosed by Park et al or Kelch. Claims 15, 16, 17 and 18 also require the lamination of two multi-layer polyolefin sheets and a gas barrier resin sheet together.

In view of the above, applicants submit that claims 10, 11 and 13 to 18 are patentable over Park et al and Kelch and, accordingly, request withdrawal of this rejection.

Claims 19 and 20 have been rejected under 35 U.S.C. § 103 (a) as obvious over Park et al and further in view of the newly cited patent to Shirai et al.

In response, applicants have cancelled claims 19 and 20 and, accordingly, submit that this rejection is moot.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

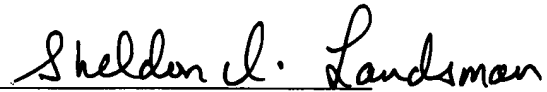
AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 09/635,141

Atty Docket No.: Q60353

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Sheldon I. Landsman
Registration No. 25,430

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: October 3, 2003